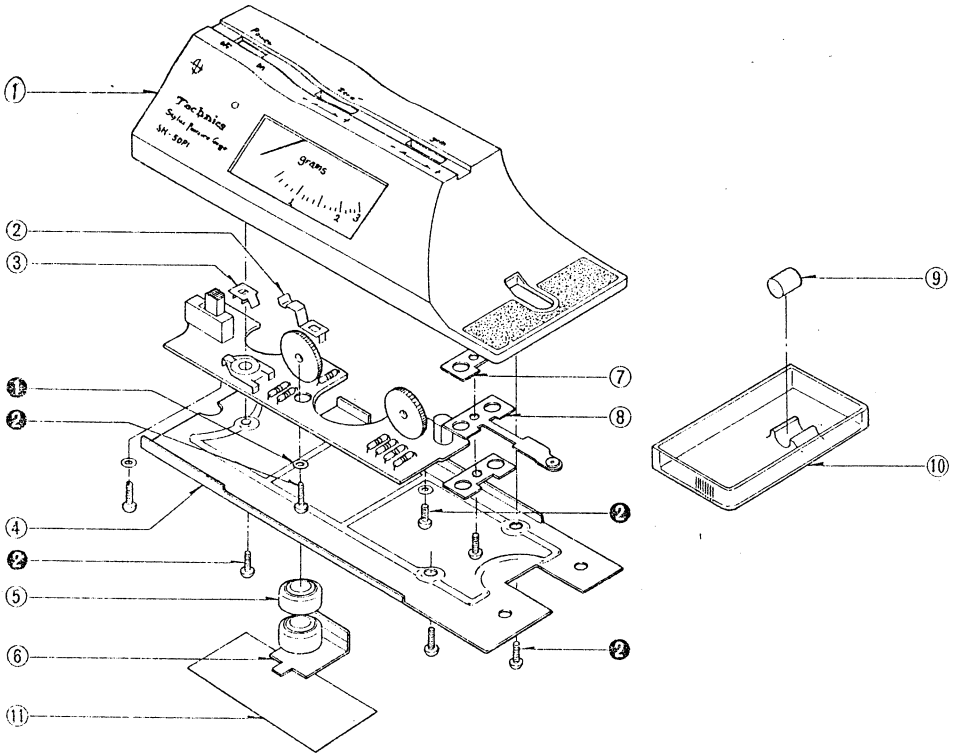
EXPLODED VIEWS



REPLACEMENT PARTS LIST

Ref. No.	Part No.	Part Name & Description
TRANSISTORS		
Q1, 2	2SC1328-T	Transistor
DIODE		
D1	LN28RP	Light Emitting Diode
VARIABLE RESISTORS		
VR1	EVLA4AA00B13	0 Adjustment
VR2	EVTS3MA00B53	0 Adjustment
VR3	EVLA4AA00B53	Gain Adjustment
SWITCH		
S1	ESB382	Switch, Power
RESISTORS		
R1, 3, 4	ERD25FJ102	Carbon, 1kΩ, 1/4W, ± 5%
R2	ERD25FJ272	Carbon, 2.7kΩ, 1/4W, ± 5%
R5, 6	ERD25FJ390	Carbon, 39Ω, 1/4W, ± 5%
	ERD25FJ470	Carbon, 47Ω, 1/4W, ± 5%
R7, 8	ERD25FJ391	Carbon, 390Ω, 1/4W, ± 5%
MECHANICAL PARTS		

Ref. No.	Part No.	Part Name & Description
1	SFPCS50001A	Case
2	SFPAT50004	Terminal (A)
3	SFPAT50005	Terminal (B)
4	SFPCS50002	Plate, Bottom
5	G13	Battery
6	SFPCS50003	Cover (A), Battery
7	SFPEW50002	Washer
8	SFPZB50020K	Spacer
9	SFPWG50005	Weight, Stylus
10	SFPZB50019	Cover (B)
11	SFPLB50008	Name Plate
SCREWS and WASHERS		
1	XWG26	Washer
2	XTN2616BFN	Screw
ACCESSORIES		
A1	SFPDS50016	Instruction Book
PACKING PARTS		
P1	SFPHB50006	Carton
P2	SFPHN50012	Pad, Top
P3	SFPHB50013	Pad, Bottom
P4	SFYF05A06	Polyethylene Bag, Battery
P5	SFYF15A20	Polyethylene Bag, Unit

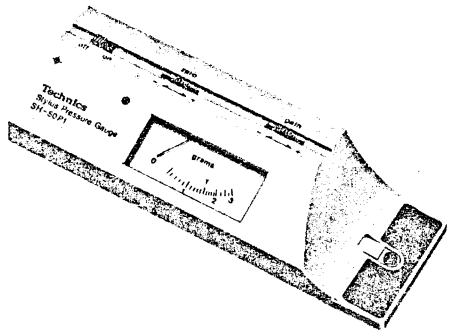
Printed in Japan
79071350 ⓈS.H.

Service Manual

Electronic Stylus Pressure Gauge

SH-50P1

(X)



Specifications

Type:	Semiconductor strain gauge electronic stylus pressure gauge, with "0" point adjustment and gain control mechanism
Power source:	DC 3V, Silver oxide battery (SR44 type) x 2
Stylus pressure measurement range:	0.5~3 g
Semiconductors used:	Semiconductor strain gauge ..... 2 Transistor ..... 2 LED 1
Dimensions:	14.7(W) x 5.2(D) x 2.4(H) cm
Weight:	125 g

Specifications subject to change without notice.

Features

1. High-sensitivity design with semiconductor strain gauge.
   A high sensitivity design which employs the piezo resistance effect to change pressure into electric resistance, this unit employs a pair of semiconductor strain gauges to compensate for temperature changes, giving added reliability and extra sensitivity.
2. Large, easy-to-read meter with direct figure readout.
3. LED lamp power "on" indicator.

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Technics

Matsushita Electric Trading Co., Ltd.
P.O. Box 288, Central Osaka Japan

ISASSEMBLY PROCEDURE

ow to remove the printed circuit board

Remove the 3 setscrews of the bottom plate.

Completely remove the solder at the leg of D1 (LED).

Note: D1 is secured on the body with adhesive, so remove the solder at its leg completely. (See Fig. 1)

Remove the 3 setscrews of the printed circuit board.

Note: Take special care not to break the leads of the element.

eplacement of element assembly

ıe leads are welded to the element, so disconnected leads nnot be repaired by soldering. Therefore, replace the ement assembly. For the lead wire arrangement refer to g. 2.

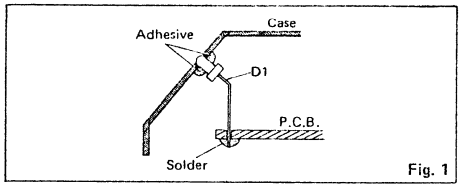


Fig. 1

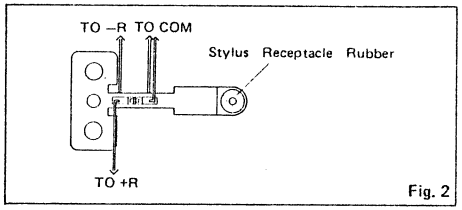


Fig. 2

DJUSTMENTS

ıen using this unit, or after replacement of the element ;embly or transistor, perform the adjustment according to e following procedure.

Set the power switch to "on".

Set the indicator to "0" by turning the zero adjustment screw.

Note: If the indicator cannot be set to "0" by turning the zero adjustment knob, completely turn the zero adjustment knob and the gain adjustment knob in the direction of plus (+), then rotate the volume screw with a screwdriver, reaching from the bottom hole of the stylus pressure gauge, so that the indicator stays within a range of 2.5 ~ 3. (See Fig. 3.)

After that, carry out the zero adjustment specified in 2.

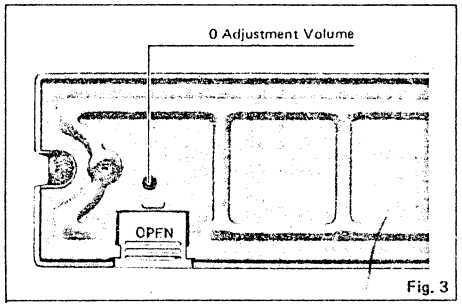


Fig. 3

Correctly place the depressed part of the attached gain adjusting weight on the projected part of the stylus receptacle. Then rotate the gain adjustment knob in the direction of plus (+) or minus (−) so that the indicator is set to 1.5g (▼) point. (Refer to Fig. 4.)

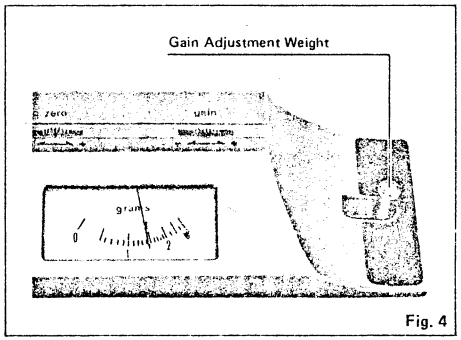
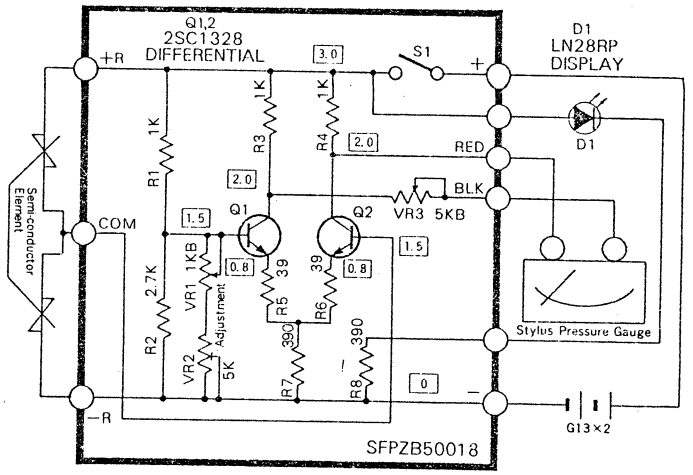


Fig. 4

Note:

- Do not put the stylus pressure gauge directly on a record disk.
- Operate the stylus pressure gauge about 10 seconds after switching it on. Also, a few seconds is required until the indicator is reset to "0".
  Such phenomena are merely due to temperature compensation, not indicating any trouble.
- Be sure to make the zero (0) adjustment before the gain adjustment.
  Never reverse this order.
- After using the gauge, remember to set the power switch to "off" in order prevent the consumption of battery power.
  If the power switch is left turned on, the battery life will be about 10 hours nearly the same as in continuous operation.

SCHEMATIC DIAGRAM (This schematic diagram may be at any time with the development of new technology.)



Note: R5 and R6 are used in accordance with the variation of semi-conductor element. Therefore, use 39Ω or 47Ω resistor.
In the case of semi-conductor element for repair, the resistance of R5 and R6 must be 39Ω.
When replacing R5 or R6, be sure to use a resistor of the specified resistance value. Otherwise, the adjustment may become impossible.

PRINTED CIRCUIT BOARD